United States Environmental Protection Agency
Region V
POLLUTION REPORT

Date: Monday, March 16, 2009
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Subject: Sediment Excavation Complete
Kalamazoo River OU5 - Plainwell Impoundment
Plainwell & Kalamazoo, MI

POLREP No.:	10	**Site #:**	059BBB05
Reporting Period:	12/07/08 - 03/16/09	**D.O. #:**	
Start Date:		**Response Authority:**	CERCLA
Mob Date:		**Response Type:**	Time-Critical
Completion Date:		**NPL Status:**	NPL
CERCLIS ID #:		**Incident Category:**	Removal Action
RCRIS ID #:		**Contract #**	

Site Description
Cleanup work to remove PCB-contaminated sediment from the Kalamazoo River□s Plainwell Impoundment is almost complete. This is the second year of an estimated 2-year project that removed 128,625 cubic yards of sediment containing approximately 4,700 pounds of PCBs.

In 2007, over 37,000 cubic yards or 1,059 truckloads of PCB-contaminated sediment were removed from the river and nearby banks. This includes removal areas 1, 2, 3A and B, 4A and B, 5, 6A and B, 7 and 8. They have completed work in the Phase 1 coffer dam area with construction of the western water diversion structure (Phase 1 coffer dam), which maintains the current flow of the river over the eastern spillway area. This allowed workers to dredge behind the dam, build a water control structure, and remove the portion of the dam in the former powerhouse area.

In 2008 and 2009, workers removed sediment and restored banks along 6,500 feet of river bank including areas 9A and B, 10A and B, 11A and 11B, 12A and B, and 13A and B. Work has been completed on mid-channel areas A, B and C, and removal of the Phase 1 and Phase 2 cofferdams. For the year, 89,600 cubic yards, or 2,560 truckloads of PCB-contaminated mud have been removed. The water control structure, which was constructed during Phase 1, has been removed, allowing the Kalamazoo River to flow freely through the new western channel, past what was once the Plainwell Dam.

Excavated Kalamazoo River sediment is being sent off-site to commercial landfills for disposal. Sediment with PCBs above the 50 ppm level will continue to be sent off-site to Environmental Quality Co.□s Wayne Disposal Landfill in Belleville, Mich. Sediment with less than 50 ppm PCBs, which is considered nonhazardous waste, will continue to be sent to Allied Waste□s C and C Landfill near Marshall, Michigan and their Ottawa Farms Landfill near Coopersville, Michigan.

See Pollution Report #1 for additional information.

Current Activities

During the week ending December 13, 2008, ARCADIS collected eleven water samples from the wastewater treatment system located at Staging Area 4N. The analytical results for the ARCADIS effluent water treatment samples indicated PCB levels below the criteria for water.

ARCADIS also collected two water samples from the Kalamazoo River. These samples were collected along the shoreline, as their boat was transported offsite. The sampling collection method does not require any sampling equipment, so no rinsate sample was needed. The analytical results for the water samples did not indicate detectable levels of PCBs.

ARCADIS did not collect any confirmation sediment samples this week.

Due to no excavation in the near-shore or mid-channel areas, ARCADIS did not conduct turbidity monitoring during the week.

Terra continued to dismantle the bridge extending across the Phase II Coffer Dam area. In conjunction with removing the bridge, Terra also removed contaminated sediment that was previously difficult to reach. Further excavation in Area 13A was also conducted. Non-TSCA-level sediment and concrete debris was processed and loaded out from Staging Area 4N. Preparation of shutting down operations continued, including decontaminating materials and equipment utilized onsite and transported offsite, including sheet piling and crane mats.

The King Company continued to dismantle the water control structure, including removing sheet piling and breaking concrete on the downstream side of the water control structure. King attempted to utilize a diver to hot cut the sheets, but ceased that activity due to its ineffectiveness. King also had difficulty removing the sheet piling, breaking them.

During the week the ending December 13, 2008, Terra shipped 33 total loads of non-TSCA-level sediment (1,622.93 tons) to the Ottawa Farms Landfill in Coopersville, MI. No shipments were sent to the C & C Landfill, in Marshall, MI. Terra did not ship and TSCA-level sediment to the Wayne Disposal Site 2 Landfill in Belleville, MI.

During the week ending December 20, 2008, ARCADIS collected two water samples from

the Kalamazoo River. The analytical results for the water samples did not indicate detectable levels for PCBs.

ARCADIS did not collect any water samples from any wastewater treatment system.

ARCADIS collected two sediment samples from Area 13A. The analytical results for all of the sediment samples indicated PCB levels below the cleanup criteria for bank/floodplain sediment.

Due to no excavation in the near-shore or mid-channel areas, ARCADIS did not conduct turbidity monitoring during the week.

Terra continued to excavate sediment from Area 13A and the Phase II Coffer Dam area. Terra continued to process and load out non-TSCA sediment from Staging Area 4N. TSCA-level sediment was stockpiled from Area 13A and the Phase II Coffer Dam area for direct load out. Terra continued operations for demobilization, including decontaminating building materials, and removing materials and equipment from the Site. Operations were slowed on December 15, 2008, due to inclement weather and poor road conditions.

King Company continued to pull sheets from the Phase II Coffer Dam area, as well as removing the bridge to the peninsula. A pier immediately downstream from the former water control structure was under construction to provide stability, allowing King to pull the remaining sheets from the former water control structure. A ramp down to the pier was also excavated.

A stake-holders□ meeting was conducted on December 17, 2008. Members of the meeting include staff representing the State, EPA, and the PRP.

During the week the ending December 20, 2008, Terra shipped 39 total loads of non-TSCA-level sediment/soil (1,942.95 tons) to the Ottawa Farms Landfill in Coopersville, MI. No shipments were sent to the C & C Landfill, in Marshall, MI. Terra also shipped eleven loads of TSCA-level sediment/soil (486.34 tons) to the Wayne Disposal Site 2 Landfill in Belleville, MI.

During the week ending December 27, 2008, ARCADIS collected five water samples from the wastewater treatment system located at Staging Area 4N. The analytical results for the effluent water treatment samples indicated PCB levels below the discharge criteria for water.

ARCADIS also collected two water samples from the Kalamazoo River. The analytical results for the water samples did not indicate detectable levels for PCBs.

ARCADIS did not collect any confirmation sediment samples this week.

Due to no excavation in the near-shore or mid-channel areas, ARCADIS did not conduct turbidity monitoring during the week.

Terra continued to load out TSCA-level sediment from Staging Area 4N. Terra and King worked to build the pier near the former water control structure. The pugmill at Staging Area 4N was prepared for demobilization.

During the week the ending December 27, 2008, Terra shipped ten loads of TSCA-level sediment/soil (512.31 tons) to the Wayne Disposal Site 2 Landfill in Belleville, MI. Terra did not ship any loads of non-TSCA-level sediment/soil offsite this week.

During the week ending January 3, 2009, ARCADIS collected the final three water samples from the wastewater treatment system located at Staging Area 4N. The analytical results for the ARCADIS effluent water treatment samples indicated PCB levels below the discharge criteria for water.

ARCADIS also collected two water samples from the Kalamazoo River. The analytical results for the water samples did not indicate detectable levels for PCBs.

ARCADIS collected two sediment samples from Area 13A-TSCA. One sample, TS20258, exceeded the cleanup criteria for sediment with a detection of 8,800 ug/kg, collected in Grid 9A. This grid will be excavated an additional six inches, and then resampled. The analytical results for the other ARCADIS sample indicated PCB levels below the cleanup criteria for bank/floodplain sediment.

ARCADIS performed turbidity monitoring on the Kalamazoo River in the Phase II Coffer Dam area on January 3, 2009. All of the downstream results were less than twice the upstream results.

Operations this week were similar to the previous week, including loading out TSCA- and non-TSCA-level sediment, decontaminating building materials and equipment for shipping off-Site, and building the pier near the former water control structure.

During the week the ending January 3, 2009, Terra shipped 39 total loads of non-TSCA-level sediment (1,796.51 tons), of which 690.78 tons was sent to the Ottawa Farms Landfill in Coopersville, MI, and 1,105.73 tons were sent to the C & C Landfill, in Marshall, MI. Terra also shipped nine loads of TSCA-level sediment (409.98 tons) to the Wayne Disposal Site 2 Landfill in Belleville, MI.

During the week ending January 10, 2009, ARCADIS collected two water samples from the Kalamazoo River. The analytical results for the water samples did not indicate detectable levels for PCBs.

ARCADIS collected one sediment sample from Area 13A-TSCA, which was a resample from Grid 9A. The analytical results for the sample indicated PCB levels below the cleanup criteria for sediment.

ARCADIS performed turbidity monitoring on the Kalamazoo River in the Phase II Coffer

Dam area on January 5, 7, and 8, 2009. All of the downstream results were less than twice the upstream results.

Operations this week were similar to the previous weeks, including loading out TSCA- and non-TSCA-level sediment, decontaminating building materials and equipment for shipping off-Site, and building the pier near the former water control structure. Area 13A was excavated, including the underburden.

King Company continued to pull the sheet piling from the Phase II Coffer Dam area, and pulling the steel from the bridge to the peninsula.

IS was onsite to conduct water blasting at Staging Area 4N.

During the week the ending January 10, 2009, Terra shipped 26 total loads of non-TSCA-level sediment (1,265.73 tons), of which 81.16 tons was sent to the Ottawa Farms Landfill in Coopersville, MI, and 1,184.57 tons were sent to the C & C Landfill, in Marshall, MI. Terra also shipped seven loads of TSCA-level sediment (261.48 tons) to the Wayne Disposal Site 2 Landfill in Belleville, MI.

During the week ending January 17, 2009, ARCADIS collected three water samples from the Kalamazoo River. The analytical results for the water samples did not indicate detectable levels for PCBs.

ARCADIS collected three sediment samples from Area 13A, two from Area 13A-TSCA, five from Area 13A1, and two from Area 13A1-TSCA, of which two were split with START. One sample from Area 13A1-TSCA, exceeded the cleanup criteria for sediment with a detection of 7,000 ug/kg, collected in Grid 8. This grid was excavated an additional six inches into the underburden, and then resampled. The analytical results for the other ARCADIS samples, as well as the START samples, indicated PCB levels below the cleanup criteria for bank/floodplain sediment.

ARCADIS performed turbidity monitoring on the Kalamazoo River in the Phase II Coffer Dam area from January 12 to 14, 2009. All of the downstream results were less than twice the upstream results.

Terra finished excavating Area 13A, and continued to load out TSCA- and non-TSCA-level sediment from Staging Area 4N. Excavation of sediment along one of the natural gas pipelines in Area 10A was completed as well. Representatives from MichCon and Consumers Energy were onsite to mark the pipeline and observe the excavation. Decommissioning of Staging Area 4N continued, with removal of soil from the pad.

King continued to pull sheet piling from the Phase II Coffer Dam area, as well as work on the pier near the former water control structure.

During the week the ending January 17, 2009, Terra shipped fifteen total loads of non-

TSCA-level sediment (679.76 tons) to the Ottawa Farms Landfill in Coopersville, MI. No shipments were sent to the C & C Landfill, in Marshall, MI. Terra also shipped nine loads of TSCA-level sediment (347.00 tons) to the Wayne Disposal Site 2 Landfill in Belleville, MI.

During the week ending January 24, 2009, ARCADIS collected two water samples from the Kalamazoo River. The analytical results for the water samples did not indicate detectable levels for PCBs.

ARCADIS did not collect any sediment samples this week.

ARCADIS performed turbidity monitoring on the Kalamazoo River in the Phase II Coffer Dam area from January 20 to 24, 2009. All of the downstream results were less than twice the upstream results.

Terra continued to load out TSCA- and non-TSCA-level sediment from Staging Area 4N, as well as decommissioning of Staging Area 4N continued, with removal of soil from the pad. Building materials and equipment were decontaminated and shipped off the Site.

King continued to attempt to pull sheet piling from the Phase II Coffer Dam area, as well as work on the pier near the former water control structure. Two sheets from the Phase I area, as well as ten sheets in the Phase II area were problematic. It was decided these sheets would be cut below the water level line.

During the week the ending January 24, 2009, Terra shipped nineteen total loads of non-TSCA-level sediment (826.38 tons) to the Ottawa Farms Landfill in Coopersville, MI. No shipments were sent to the C & C Landfill, in Marshall, MI. Terra also shipped six loads of TSCA-level sediment (251.37 tons) to the Wayne Disposal Site 2 Landfill in Belleville, MI.

During the week of January 31, 2009, remedial activities on the Site were wrapping up. The final load of contaminated sediment was sent off-Site. Staging Area 4N was completely decommissioned. Terra is expected to be off the Site, along with all of their building materials and equipment.

During the week the ending January 31, 2009, Terra shipped 44 total loads of non-TSCA-level sediment (1,906.07 tons), of which 1,800.56 tons were shipped to the Ottawa Farms Landfill in Coopersville, MI, and 105.51 tons were shipped to the C & C Landfill, in Marshall, MI. Terra did not ship any TSCA-level sediment to the Wayne Disposal Site 2 Landfill in Belleville, MI.

A total of 1,576 loads of non-TSCA-level sediment, totaling 77,552.46 tons, were removed from the Site since May 17, 2008. A total of 558 loads of TSCA-level sediment, totaling 27,426.47 tons, were removed as well.

King Company remained on the Site, working on the Phase II Coffer Dam area, finishing cutting the sheets in that area. They also worked on the pier near the former water control structure, breaking up the scour protection previously installed during the flooding earlier in

the year.

During the week ending February 7, 2009, King Company continued removal of the water control structure. Five pair of sheets from the water control structure could not be fully removed using a vibratory or an impact hammer. Due to river velocity in the area and water elevation, divers could not safely access the sheets.

During the weeks ending February 14 and 21, 2009, King Company continued removing the water control structure. A diversion structure was installed to deflect water away so divers could safely access the remaining sheets. These sheets were cut off near the riverbed, and the upper sections of the sheets removed. The location of the sheets remaining in the riverbed was recorded using a GPS device.

During the week ending March 7, 2009, ARCADIS began installing fifteen groundwater monitoring wells at the former Plainwell Impoundment to evaluate the potential presence of PCBs in groundwater from potential source areas remaining in the flood plains and assess the migration of PCBs (if any) to the river.

During the week ending March 14, 2009, ARCADIS completed the groundwater monitoring well installation. ARCADIS also collected post-construction surface sediment samples from the Plainwell Impoundment TCRA removal areas that were completed in 2008.

Planned Removal Actions

Collect groundwater samples from the 15 monitoring wells.

Evaluate data from the post-construction surface sediment samples collected in March 2009.

Complete restoration activities starting this Spring 2009.

Collect groundwater samples from the 15 monitoring wells.

See Pollution Report #1.

Next Steps

EPA has continued discussions with the Kalamazoo River Study Group for a possible cleanup near the Plainwell Number 2 Dam in Area 1 of the Kalamazoo River. This area was a focus of recent contamination studies. EPA is evaluating the study data and determining the scope of work, which could begin this year. However, the recent Millennium bankruptcy filling could affect this project.

An expedited cleanup plan developed by the Kalamazoo River Study Group in August 2008 also proposes additional cleanup work in other Kalamazoo River downstream areas during

the next 12 years. EPA will discuss future plans with the Kalamazoo River Study Group, MDEQ, trustees and stakeholders.

Key Issues

On Jan. 6, Lyondell Chemical Company and 79 affiliated debtors filed for bankruptcy under Chapter 11 reorganization. One of the debtors is Millennium Holdings LLC, one of the responsible parties at the Kalamazoo River site. The bankruptcy reorganization process is typically a lengthy process (lasting from months to possibly years) which allows a company to restructure its finances through a reorganization plan and discharge many of its pre-bankruptcy debts. Under the Bankruptcy Code, claims are prioritized and organized into classes and paid in accordance with the bankruptcy priority scheme. Generally, higher priority claims must be paid in full before any payment is made to creditors holding lower priority claims. In addition, reorganized companies may still be responsible for their environmental liabilities following bankruptcy. However, bankruptcy is intended to allow a company a fresh start financially by eliminating many of its pre-bankruptcy debts and liabilities. EPA is currently evaluating options under bankruptcy and environmental law to ensure that the cleanup of the Kalamazoo River site continues.

Estimated Costs *

	Budgeted	Total To Date	Remaining	% Remaining
Extramural Costs				
RST/START	$434,000.00	$370,191.00	$63,809.00	14.70%
Intramural Costs				
Total Site Costs	$434,000.00	$370,191.00	$63,809.00	14.70%

* *The above accounting of expenditures is an estimate based on figures known to the OSC at* the time this report was written. The OSC does not necessarily receive specific figures on final payments made to any contractor(s). Other financial data which the OSC must rely upon may not be entirely up-to-date. The cost accounting provided in this report does not necessarily represent an exact monetary figure which the government may include in any claim for cost recovery.

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